

REMARKS

Claims 1-11 and 13-21 remain pending in the present application. The claims have not been amended in response to the Office Action.

DRAWINGS

The drawings are objected to under 37 CFR 1.83(a). Applicants respectfully traverse this rejection. Applicants believe the first flow path is the only flow path from the upper working chamber into the reserve chamber as detailed below. Withdrawal of the objection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 112

Claims 1-11 and 13-21 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse this rejection. Claim 1 defines a first flow path which includes a first variable orifice for controlling flow from said upper working chamber to said reserve chamber. Claim 1 also defines this first flow path as being the only flow path from the upper working chamber to the reserve chamber.

The Examiner is of the opinion that a second flow path from the upper working chamber to the reserve chamber exists by way of extension valve 34 into the lower working chamber and then into the reserve chamber via elements 132, 80, 86 as discussed in paragraph [0019] of the published application.

Applicants would like to thank the Examiner for her time and discussion of the two flow paths. Applicants pointed out that the fluid path defined by the Examiner is not

possible. As defined on page 13 at the bottom of paragraph [0027], the compression movement of piston 12 creates a low pressure within upper working chamber 24 and one-way check valve 32 will open and allow fluid flow from lower working chamber to upper working chamber. Thus, as illustrated in Figure 1, when there is a higher pressure in lower working chamber 26 due to movement of piston 12, valve 34 will remain closed and valve 32 will open. Thus, valve 34 opens only during a rebound or extension stroke (see paragraph [0014]).

During a rebound stroke, as defined in paragraph [0026], check valve 34 remains closed but can open when an excessive pressure in upper working chamber 24 occurs. This feature is described at the end of paragraph [0014]. During a rebound movement of piston 12, a low pressure within lower working chamber 26 is created and this causes check valve 42 to open to allow fluid flow from reserve chamber to lower working chamber 26. Thus, when fluid flows through valve 34, fluid also flows from the reserve chamber to the lower working chamber via valve 42 and thus, the additional flow path described by the Examiner cannot be created.

The flow of fluid through check valve 32 during a compression stroke and through check valve 42 during an extension stroke is caused by "rod volume" flow which is well known in the art. When piston 12 moves upward (extension) more fluid is needed in lower working chamber 26 than is displaced in upper working chamber 24 due to the volume of piston rod 14. In a similar manner, when piston 12 moves downward, there will be more fluid displaced from lower working chamber 26 than is needed to replace fluid in upper working chamber 24. This fluid flows through passage 132. Thus, the first flow path is used only during an extension stroke and it is the only

flow path from the upper working chamber to the reserve chamber. Reconsideration of the rejection is respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By: 

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